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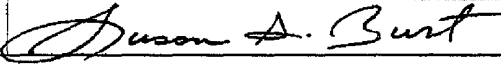
TRANSMITTAL FORM <i>(to be used for all correspondence after initial filing)</i>	Application Number	09/887,497
	Filing Date	6/22/2001
	First Named Inventor	Kyle P. Austin
	Art Unit	
	Examiner Name	
Total Number of Pages in This Submission	41	Attorney Docket Number 106184

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
Remarks Supplemental Disclosure Statement Before Mailing of First Office Action Under 37 CFR 1.97(b)(3); and attachments: Int'l Search Report; French patent FR 2 160 269 A		
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT		
Firm or Individual	Michael A. Moore	
Signature	<i>Michael A. Moore</i>	
Date	September 26, 2003	

CERTIFICATE OF TRANSMISSION/MAILING			
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on this date: <u>Sept. 26, 2003</u>			
Typed or printed	Susan G. Burt		
Signature	<i>Susan G. Burt</i>		Date
		September 26, 2003	

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

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I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the Commissioner for Patents, Alexandria, VA 22313-1450 or transmitted by facsimile.			
Name (Print/Type)	Susan G. Burt		
Signature		Date	September 26, 2003

PATENT**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of)	
Kyle P. Austin et al.)	Attorney Docket No. 106184
Application No. 09/887,497)	Examiner: Unknown
Filed: June 22, 2001)	Group Art Unit: Unknown
REACTION AND REGENERATION SYSTEM)	

**SUPPLEMENTAL DISCLOSURE STATEMENT
BEFORE MAILING OF FIRST OFFICE ACTION
UNDER 37 C.F.R. §1.97(b)(3)**

Commissioner for Patents
Arlington, VA 22313-1450

Dear Sir:

In addition to the references cited in the Information Disclosure Statement filed with the above identified application, Applicant submits herewith documents with respect to which Applicant believes there may be a duty to disclose the existence and contents thereof. These documents are listed on Form PTO-1449 attached hereto.

All of the documents submitted herewith were cited in the International Search Report dated June 23, 2003, for the counterpart International Application No. PCT/US 02/20168.

One of the submitted documents, FR 2 160 269 A, is not in the English language. Therefore, Applicant also submits herewith the above mentioned International Search Report. Thus, the requirement under MPEP 609, III, A(3) ("Concise Explanation of Relevance for Non-English Language Information") is satisfied for FR 2 160 269 A.

Appln. No. 09/887,497
Attorney Docket 106184

The filing of this supplemental information disclosure statement shall not be construed as a representation that a search has been made (37 CFR 1.97(g)), nor as an admission that the information cited is, or is considered to be, material to patentability or that no other material information exists.

The filing of this supplemental information disclosure statement shall not be construed as an admission in any manner.

A copy of the above-mentioned International Search Report is attached hereto. Copies of all listed documents listed therein are also attached hereto, with the exception of U.S. patents and published patent applications pursuant to the July 11, 2003 notice entitled "Information Disclosure Statements May Be Filed Without Copies of U.S. Patents and Published Applications in Patent Applications filed after June 30, 2003" signed by Stephen G. Kunin, Deputy Commissioner for Patent Examination Policy.

Initialing of each document after its consideration by the Examiner is now respectfully requested in this matter.

Respectfully submitted,

UOP LLC



Michael A. Moore

Attorney for Applicant

Reg. No. 41,203

Phone: (847) 391-2948

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MAM:sb

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Sheet 1 of 1

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)	ATTY. DOCKET NO.: 106184	APPLICATION NO.: 09/887,497
	APPLICANT: Kyle P. Austin et al.	
	FILING DATE: 06/22/2001	GROUP ART UNIT: Unknown

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	3,647,680	3-7-1972	Greenwood et al.	208	65	9/25/1969
	4,048,057	9-13-1977	Murphy	208	89	10-4-1976
	4,615,792	10-7-1986	Greenwood	208	134	4-25-1985
	4,961,907	10-9-1990	Herbst et al.	422	144	3-13-1989

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	INTERNATIONAL CLASSIFICATION	TRANSLATION YES NO
FR 2 160 269 A	June 29, 1973	France	C 10 g 39/00//B 01 j 11/00	No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER	DATE CONSIDERED		

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Appln. No. 09/887,497
Attorney Docket 106184

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

PCT

To:
UOP LLC
Attn. Tolomei, John G.
25 East Algonquin Road
Des Plaines, Illinois, 60017-5017
UNITED STATES OF AMERICA

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL SEARCH REPORT
OR THE DECLARATION

Docketed for

7/23/03

(PCT Rule 44.1)

RECEIVED

JOHN G. TOLOMEI

JUN 23 2003

Date of mailing
(day/month/year)

23/06/2003

Applicant's or agent's file reference
106184(2422)

UOP Patent Dept

FOR FURTHER ACTION

See paragraphs 1 and 4 below

International application No.
PCT/US 02/20168

International filing date
(day/month/year)

19/06/2002

Applicant

UOP LLC

1. ☒ The applicant is hereby notified that the International Search Report has been established and is transmitted herewith.

Filing of amendments and statement under Article 19:

The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46):

When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet.

Where? Directly to the International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland
Facsimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no International Search Report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.

3. ☐ With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.

☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Further action(s):** The applicant is reminded of the following:

Shortly after 18 months from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

Within 19 months from the priority date, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later).

Within 20 months from the priority date, the applicant must perform the prescribed acts for entry into the national phase before all designated Offices which have not been elected in the demand or in a later election within 19 months from the priority date or could not be elected because they are not bound by Chapter II.

Name and mailing address of the International Searching Authority



European Patent Office, P.B. 5818 Patentlaan 2
NL-2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Nadine Klop

Form PCT/ISA/220 (July 1998)

NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions respectively.

INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only.

What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been/is filed, see below.

How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

What documents must/may accompany the amendments?**Letter (Section 205(b)):**

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

1. [Where originally there were 48 claims and after amendment of some claims there are 51]:
"Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
2. [Where originally there were 15 claims and after amendment of all claims there are 11]:
"Claims 1 to 15 replaced by amended claims 1 to 11."
3. [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:
"Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or
"Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
4. [Where various kinds of amendments are made]:
"Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

"Statement under article 19(1)" (Rule 48.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

It must be in the language in which the international application is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

Consequence if a demand for international preliminary examination has already been filed

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(a), first sentence).

Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 106184(2422)	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, Item 5 below.	
International application No. PCT/US 02/ 20168	International filing date (day/month/year) 19/06/2002	(Earliest) Priority Date (day/month/year) 22/06/2001
Applicant UOP LLC		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

2. ☐ Certain claims were found unsearchable (See Box I).

3. ☐ Unity of invention is lacking (see Box II).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☒ because this figure better characterizes the invention.

1
☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 02/20168

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	FR 2 160 269 A (INST FRANCAIS DU PETROL) 29 June 1973 (1973-06-29) figure 1 -----	1-10

Form PCT/ISA/210 (continuation of second sheet) (July 1992)

page 2 of 2

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 02/20168

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 3647680	A	07-03-1972	AR 219262 A1	15-08-1980
			AT 311525 B	26-11-1973
			BE 764747 A1	16-08-1971
			CA 938237 A1	11-12-1973
			DE 2046853 A1	15-04-1971
			DK 132446 B	08-12-1975
			ES 383958 A1	01-03-1973
			FR 2064274 A5	23-07-1971
			GB 1329098 A	05-09-1973
			GB 1329097 A	05-09-1973
			GB 1329096 A	05-09-1973
			JP 49002161 B	18-01-1974
			MY 12674 A	31-12-1974
			MY 12774 A	31-12-1974
			NL 7013973 A ,B,	29-03-1971
			OA 4048 A	15-10-1979
			PL 84614 B1	30-04-1976
			PL 77702 B1	30-04-1975
			SE 372774 B	13-01-1975
			US 3725248 A	03-04-1973
			US 3761390 A	25-09-1973
			YU 236170 A ,B	15-03-1980
			ZA 7006449 A	26-04-1972
			ZA 7101948 A	26-04-1972
US 4615792	A	07-10-1986	SU 1713421 A3	15-02-1992
US 4961907	A	09-10-1990	AU 608770 B2	18-04-1991
			AU 7791987 A	10-03-1988
			CA 1297062 A1	10-03-1992
			DE 3782221 D1	19-11-1992
			DE 3782221 T2	06-05-1993
			EP 0259155 A1	09-03-1988
			JP 63069534 A	29-03-1988
			US 4871446 A	03-10-1989
US 4048057	A	13-09-1977	NONE	
FR 2160269	A	29-06-1973	FR 2160269 A1	29-06-1973
			AR 229665 A1	31-10-1983
			AT 334492 B	25-01-1976
			AT 969272 A	15-05-1976
			BE 790431 A1	24-04-1973
			CA 980281 A1	23-12-1975
			DE 2255497 A1	24-05-1973
			DE 2265608 C2	28-01-1988
			EG 10731 A	31-12-1976
			ES 408625 A1	16-03-1976
			FR 2170899 A2	21-09-1973
			FR 2175549 A2	26-10-1973
			GB 1364617 A	21-08-1974
			GB 1364616 A	21-08-1974
			IT 974673 B	10-07-1974
			JP 1014538 C	25-09-1980
			JP 48062802 A	01-09-1973
			JP 52048601 B	10-12-1977
			JP 1177222 C	14-11-1983
			JP 52107004 A	08-09-1977

Form PCT/ISA/210 (patent family annex) (July 1992)

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 02/20168

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
FR 2160269 A		JP 57047952 B	13-10--1982
		JP 1268412 C	10-06--1985
		JP 52107005 A	08-09--1977
		JP 56040194 B	18-09--1981
		JP 52107006 A	08-09--1977
		JP 56040195 B	18-09--1981
		NL 7215493 A ,B,	18-05--1973
		NO 137555 B	05-12--1977
		NO 751262 A ,B,	18-05--1973
		SE 394687 B	04-07--1977
		SE 408804 B	09-07--1979
		SE 7506318 A	03-06--1975
		US 4133743 A	09-01--1979
		US 4233268 A	11-11--1980
		US 4210519 A	01-07--1980
		ZA 7207952 A	25-07--1973

Form PCT/ISA/210 (patent family annex) (July 1992)